

IN THE SPECIFICATION

Please replace the paragraph beginning at page 1, line 22, with the following rewritten paragraph:

However, in the above prior-art clamping device, [[a]] the position where the workpiece is clamped by the clamping arm has to be set in advance by adjusting the clamping device according to a size of the workpiece. Because the clamping position has been set according to the size of the workpiece, the clamping device needs to be stopped temporarily to reset the clamping position according to a size of a workpiece before clamping the workpiece of a different size. Moreover, when respective members forming a mechanism such as the toggle mechanism for transmitting a driving force from the driving source to the clamping arm wear as a result of repetition of operation, the clamping position is displaced and the workpiece cannot be clamped accurately. Therefore, the clamping device needs to be readjusted periodically to reset the clamping position.

Please replace the paragraph beginning at page 2, line 9, with the following rewritten paragraph:

As described above, in the conventionally-known clamping device, the above-described troublesome resetting operation of the clamping position is required so as to accurately clamp the workpiece in the clamping position by the clamping arm and an operation efficiency is decreased. They include the following:

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|-----|-------------------|---|
| (1) | Patent Document 1 | Japanese Patent Application Laid-open No. |
|     | 2001-105332       |   |
| (2) | Patent Document 2 | Japanese Patent Application Laid-open No. |
|     | 2001-310225       |   |

(3) Patent Document 1 Japanese Patent Application Laid-open No.  
2001-009741

Please replace the paragraph beginning at page 2, line 22, with the following rewritten paragraph:

It is a technical object of the present invention to provide a clamping device in which the above problem is solved, such that there is no need to carry out troublesome setting operation of a clamping position according to a size of a workpiece and wear of respective components, and ~~an operation~~ operational efficiency can be improved.

Please replace the paragraph beginning at page 4, line 8, with the following rewritten paragraph:

Thus, according to the invention, the first clamping arm is driven and rotated by the worm and the worm wheel and the rotating force is applied to the junction frame in a position where the workpiece is clamped to thereby apply the required clamping force to the first clamping arm through the worm and the worm wheel. Therefore, regardless of where a stop position of the first clamping arm occurs, i.e., where the clamping position is, the required clamping force can be generated to clamp the workpiece. In other words, irrespective of size of the workpiece, the workpiece can be clamped. Therefore, the troublesome setting operation of the clamping position which used to be carried out according to the size of the workpiece and wear of the respective components in prior art is not necessary and the operation efficiency is increased.

Please replace the paragraph beginning at page 7, line 10, with the following rewritten paragraph:

The clamp arm driving mechanism 6 includes a worm wheel 10 fixedly mounted to the arm rotary shaft 5, a worm 11 engaged with the worm wheel 10, a first driving source 12 for driving the worm 11, and a transmission mechanism 13 for transmitting a rotating force of the first driving source 12 to the worm 11. The worm 11, the first driving source 12, and the transmission mechanism 13 are supported on a junction frame 14. The junction frame 14 is disposed so as to be able to turn around the arm rotary shaft 5 independently of the arm rotary shaft 5. The worm 11 and the first driving source 12 are mounted to be adjacent to each other on the junction frame 14, and an output shaft 12a of the first driving source 12 and a rotary shaft 11a of the worm 11 are connected by a plurality of spur gears 13a forming the transmission mechanism 13.

Please replace the paragraph beginning at page 8, line 25, with the following rewritten paragraph:

The clamping force applying mechanism 7 includes a clamping spring 20 for applying a spring force to the lever 14a of the junction frame 14, a second driving source 21 for controlling the clamping spring 20, and a transmitting shaft 22 for relating the clamping spring 20 to the second driving source 21. The clamping spring 20 is formed by stacking a plurality of annular disc springs 20a alternately in opposite orientations. The transmitting shaft 22 passes through a center of the stack of disc springs, a large-diameter shaft head portion 22a at a tip end of the transmitting shaft 22 is in contact with one end of the stack of disc springs from outside, and the other end of the stack of disc springs is in contact with the spring seat 16. Therefore, the stack of disc springs, i.e., the clamping spring 20 is sandwiched between the shaft head portion 22a of the transmitting shaft 22 and the spring

seat 16. The transmitting shaft 22 is slidably supported ~~slidably~~ on the spring seat 16 and moves forward and backward with respect to the lever 14a of the junction frame 14.

Please replace the paragraph beginning at page 13, line 9, with the following rewritten paragraph:

The load characteristic of the disc spring can be adjusted ~~[[in]]~~ over a wide range in general not only by forming the spring on the above condition but also by combining a plurality of disc springs in parallel or series. Therefore, it is possible to properly select conditions on which the load is constant irrespective of the flexure.

Please replace the paragraph beginning at page 13, line 23, with the following rewritten paragraph:

Thus, in the clamping device having the above structure, the first clamping arm 2 is driven and rotated by the worm 11 and the worm wheel 10 and the rotating force is applied to the junction frame 14 in a position where the workpiece W is clamped to thereby apply the required clamping force to the first clamping arm 2 through the worm 11 and the worm wheel 10. Therefore, regardless of where ~~[[a]]~~ the stop position of the first clamping arm 2 occurs, i.e., where the clamping position is, the required clamping force can be generated to clamp the workpiece W. In other words, irrespective of size of the workpiece W, the workpiece W can be clamped with the constant clamping force. Therefore, the troublesome setting operation of the clamping position which used to be carried out in prior art according to the size of the workpiece W and wear of the respective components is not necessary and the operation efficiency is increased.